RESEARCH

At the Space Vehicles and Directed Energy Directorates is broad and varied. Research areas include:

- Satellite and Spacecraft Communications Systems
- Reconfigurable Electronics Systems
- Guidance, Navigation, and Control Systems
- Molecular & Radiation Hardened Electronics
- Electronic Components Design and Packaging
- Satellite Design & Systems Engineering
- Hyperspectral & Remote Sensing Techniques
- Large Deployable Space Structures
- Composite Structures Design and Analysis
- Thermal Design and Control
- Photovoltaics and Power Generation
- Estimation, Data Fusion, & Autonomous Space Systems
- Advanced Cryogenic Cooling Technologies
- Ionosphere Climatology
- Solar Science
- Charged Particle and Atmospheric Oxygen Research
- Advanced Laser Concepts
- Modeling and Simulation for High Energy Lasers and High Power Microwaves
- High Power Microwave Sources
- Advanced Astrodynamic, Adaptive Optics, and Non-Imaging Techniques for Space Surveillance

Class of 2006 AFRL Scholars with 2006 Keynote Speaker Dr. Peter Diamandis, Chairman of the Ansari X-Prize Foundation.

SPACE SCHOLARS and DIRECTED ENERGY SCHOLARS

Looking for an exciting, challenging summer experience?

Here is an opportunity in space science and engineering and directed energy you cannot afford to miss!

SPACE VEHICLES DIRECTORATE and DIRECTED ENERGY DIRECTORATE
AIR FORCE RESEARCH LABORATORY

http://www.afrl.af.mil
http://www.vs.afrl.af.mil
http://www.de.afrl.af.mil

THE SCHOLARS PROGRAM

is conducted by the Air Force Research Laboratory's Space Vehicles and Directed Energy Directorates, which have major facilities at Kirtland Air Force Base, Albuquerque, New Mexico; Hanscom Air Force Base, Bedford, Massachusetts; the National Solar Observatory in Sunspot, New Mexico; and the Air Force Maui Optical and Super Computing Center in Maui, Hawaii.

PURPOSE

Space and Directed Energy Scholars participate in a unique summer program that could lead to full-time employment working to satisfy current and future Air Force space and directed energy technology needs.

PROGRAM

The Space and Directed Energy Scholars Program offers select students opportunities to conduct specific research which is mentored by nationally recognized science and engineering experts.

Descriptions of current research topics appear on our web sites, and applicants are encouraged to contact listed mentors specializing in the student's particular area of interest.

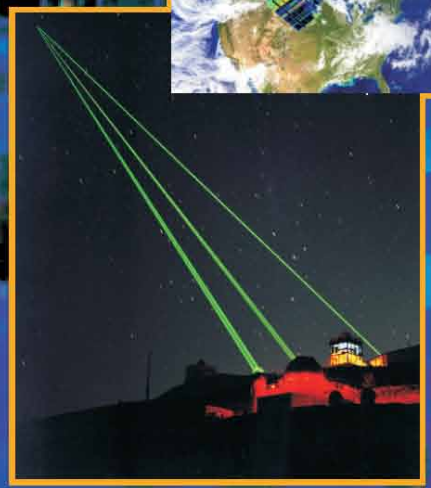
Successful applicants will research novel projects designed to advance national military space and directed energy technology and science. Students are also encouraged to co-author an article—based on their summer research—for submittal to a refereed scientific journal or conference.

Motivated undergraduate juniors and seniors, masters and doctoral students with top academic credentials in scientific and engineering fields are invited to apply. Outstanding letters of reference are required.

Only US citizens are eligible.

AFRL is an equal opportunity employer.

TacSat-3

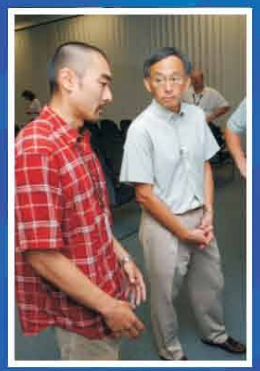


3-Beam Starfire Optical Range

Application materials and information regarding additional research topics can be obtained on our web sites:

http://www.vs.afrl.af.mil/SpaceScholars/

http://www.de.afrl.af.mil/Scholars/



During the end-of-the year poster session, 2003 Program Keynote Speaker Dr. Stephen Chu of Stanford University, winner of the 1997 Nobel Prize in Physics, listens to AFRL Scholars discussing the results of their research projects.